

NEBRASKA CAREER & TECHNICAL EDUCATION

PROGRAMS OF STUDY 2020-2021





Agriculture, Food, and Natural Resources Career Field Agriculture, Food, and Natural Resources Cluster

Full Year Course

Common of CTF Common	Introduction Course	Constant Course	
Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
	011000 Intro to Agriculture, Food and Natural Resources -OR-	011009 Agribusiness	011011 Agricultural Sales and Communications - OR-
Agribusiness Systems	018060 CASE Introduction to		011010 Agricultural Economics -OR-
	AFNR		012005 Agribusiness Management and Entrepreneurship
	011000 Intro to Agriculture, Food and Natural Resources -OR-	011009 Agribusiness -AND- 017000 Agricultural	011011 Agricultural Sales and Communications - OR-
Agribusiness Systems Plus	018060 CASE Introduction to	Leadership and Career Readiness	011010 Agricultural Economics -OR-
	AFNR		012005 Agribusiness Management and Entrepreneurship
	011000 Intro to Agriculture, Food and Natural	011004 Animal Science -OR- 018062 CASE	011006 Small Animal Management -OR-
Animal Systems	Resources -OR- 018060 CASE Introduction to	Animal Science	011005 Large Animal Management -OR-
Animal Systems	AFNR		011015 Veterinary Science -OR-
			012004 Agriculture Biotechnology -OR-
			018063 CASE Biotechnology
	011000 Intro to Agriculture, Food and Natural	011004 Animal Science -OR- 018062 CASE	011006 Small Animal Management -OR-
	Resources -OR- 018060 CASE Introduction to	Animal Science - AND-	011005 Large Animal Management -OR-
Animal Systems Plus	AFNR	017000 Agricultural Leadership and	011015 Veterinary Science -OR-
		Career Readiness	012004 Agriculture Biotechnology -OR-
			018063 CASE Biotechnology

Environmental and Natural Resources Environmental and Natural Resources Plus	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR 011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	Environmental and Natural Resources - OR- 018064 CASE Natural Resources and Ecology 013000 Environmental and Natural Resources - OR-	013001 Wildlife - OR- 013002 Environmental and Natural Resources Management 013001 Wildlife - OR- 013002 Environmental and Natural Resources Management
Food Products and Processing Systems	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	014000 Food Science and Safety -OR- 018065 CASE Food	014001 Food Products and Technology -OR- 018081 FNS Food Science -OR- 018082 FNS Nutrition Science
Food Products and Processing Systems Plus	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	014000 Food Science and Safety -OR- 018065 CASE Food Science and Safety -OR- 018080 FNS Food Production, Nutrition, and Health -AND- 017000 Agricultural Leadership and Career Readiness	014001 Food Products and Technology -OR- 018081 FNS Food Science -OR- 018082 FNS Nutrition Science
Plant Systems	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	011007 Plant Science -OR- 018061 CASE Plant Science	011008 Crop Management/Agron omy -OR- 012001 Nursery and Landscape -OR- 012002 Floriculture -OR- 012004 Agriculture Biotechnology -OR- 018063 CASE Biotechnology

Plant Systems Plus	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	011007 Plant Science -OR- 018061 CASE Plant Science -AND- 017000 Agricultural Leadership and Career Readiness	011008 Crop Management/Agron omy -OR- 012001 Nursery and Landscape -OR- 012002 Floriculture -OR- 012004 Agriculture Biotechnology -OR- 018063 CASE Biotechnology
Power, Structural and Technical Systems	Agriculture, Food and Natural Resources -OR-	016004 Welding - OR- 016000 Power, Structural, and Technical Foundations -OR- 018066 CASE Agriculture Power and Technology	016005 Metals and Fabrication -OR- 016006 Precision Agriculture and Engineering -OR- 016003 Power, Structural, and Technology Systems
Power, Structural and Technical Systems Plus	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	016004 Welding - OR- 016000 Power, Structural, and Technical Foundations -OR- 018066 CASE Agriculture Power and Technology - AND- 017000 Agricultural Leadership and Career Readiness	016005 Metals and Fabrication -OR- 016006 Precision Agriculture and Engineering -OR- 016003 Power, Structural, and Technology Systems

	Introduction (***	10.1.001.1.1	
	011000 Intro to Agriculture, Food	011004 Animal Science -OR-	
	and Natural	018062 CASE	
	Resources -OR-	Animal Science -	
	018060 CASE	AND-	
	Introduction to AFNR	011007 Plant	
		Science -OR-	
		018061 CASE Plant Science -AND-	
		011009 Agribusiness -OR-	
		014000 Food Science and Safety -OR-	
		018065 CASE Food Science and Safety -OR-	
Diversified Agriculture Systems		018080 FNS Food Production, Nutrition, and Health -OR-	
		013000 Environmental and Natural Resources - OR-	
		018064 CASE Natural Resources and Ecology -OR-	
		016004 Welding - OR-	
		016000 Power, Structural, and Technical Foundations -OR-	
		018066 CASE Agriculture Power and Technology	

	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	MAR.	011004 Animal Science -OR- 018062 CASE Animal Science - AND- 011007 Plant Science -OR- 018061 CASE Plant Science -AND-	
			011009 Agribusiness -OR- 014000 Food Science and Safety -OR-	
			018065 CASE Food Science and Safety -OR-	
Diversified Agriculture Systems Plus			018080 FNS Food Production, Nutrition, and Health -OR-	
			013000 Environmental and Natural Resources - OR-	
			018064 CASE Natural Resources and Ecology -OR-	
			016004 Welding - OR-	
			016000 Power, Structural, and Technical Foundations -OR-	
			018066 CASE Agriculture Power and Technology - AND-	
			017000 Agricultural Leadership and Career Readiness	

Sarah Heideman

Agriculture, Food, and Natural Resources
Career Field Specialist

402.471.0015

sarah.heideman@nebraska.gov neaged.org



Business, Marketing, and Management Career Field

Business Administration Cluster

Full Year

r	Course	11
ı	Course	LANE.

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
	032300 Introduciton to Business -OR- 032400 College Introduction to Business -OR-	030501 Accounting	030502 Accounting 2
Accounting	033000 Personal Finance -OR- 033002 Wealth Building Fundamentals		
Advance Accounting	030503 Accounting 3	030504 Accounting 4 -OR- 030302 College Principles of Accounting	320705 Business Mgmt Work-Based Learning Experience
Entrepreneurship	032300 Introduciton to Business -OR- 032400 College Introduction to Business	030501 Accounting 1 -OR- 038100 Marketing - OR- 031800 Economics	032370 Entrepreneurship - OR- 032600 College Introduction to Entrepreneurship
Management	032300 Introduciton to Business -OR- 032400 College Introduction to Business	038101 Marketing Management -OR- 032370 Entrepreneurship - OR- 032600 College Introduction to Entrepreneurship - OR- 030900 Business Law	032802 Management and Leadership
Business Technology Communications	270501 IT Applications 1	270502 IT Applications 2	030600 Business Communications
Business Technology Applications	033422 Introduction to Business Technology	270501 IT Applications 1	270502 IT Applications 2

Approved National Models Program of Study (POS)

			and the
Full	Year	Course	1

National POS	Introduction Course	Intermediate Course	Capstone Course
NAF Academy of Finance	030803 Financial Services	032400 College Introduction to	030802 Insurance - OR-
		Business	034100 Business in a Global Economy - OR-
			030801 Financial Planning -OR-
			032370 Entrepreneurship
High School of Business	032300 Introduciton to Business	031800 Economics	038100 Marketing - AND-
			033001 Principles of Finance -AND-
			032802 Management and Leadership -AND-
			031805 Business Strategies

Mary Janssen

Business, Marketing, and Management Career Field Specialist 402.471.4818

mary.janssen@nebraska.gov education.ne.gov/nce/BMIT



Business, Marketing, and Management Career Field Finance Cluster

Full Year Course

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Finance	032300 Introduciton to Business -OR-	030501 Accounting	038501 AP Microeconomics - OR-
	032400 College Introduction to Business -OR-		038503 College Microeconomics -
	033000 Personal Finance -OR- 033002 Wealth Building		OR- 038500 AP Macroeconomics - OR-
	Fundamentals		038502 College Macroeconomics - OR-
			111700 Statistics/Probability -OR-
			031800 Economics

Mary Janssen

Business, Marketing, and Management Career Field Specialist 402.471.4818

mary.janssen@nebraska.gov education.ne.gov/nce/BMIT



Business, Marketing, and Management Career Field

Hospitality and Tourism Cluster

Full	Year	Course	11
			beckell.

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
	090107 Fundamentals of	370021 Culinary Skills 1	370022 Culinary Skills 2 -OR-
Culinary Arts	Food and Nutrition		320600 Fundamentals of Entrepreneurship - OR-
			032370 Entrepreneurship - OR-
			032600 College Introduction to Entrepreneurship
ProStart	090107 Fundamentals of Food and Nutrition	370030 ProStart 1	370031 ProStart 2

Kristin Vest

Human Sciences & Education
Career Field Specialist

402.471.4814

kristin.vest@nebraska.gov education.ne.gov/nce/HSE



Business, Marketing, and Management Career Field Marketing Cluster

Full	Year	Course	1
			No. of the

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Marketing	038100 Marketing	038101 Marketing Management	038201 College Principles of Marketing -OR-
			038200 Advanced Marketing
Marketing Entrepreneurship	038100 Marketing	038101 Marketing Management	032370 Entrepreneurship - OR-
			032600 College Introduction to Entrepreneurship

Mary Janssen

Business, Marketing, and Management Career Field Specialist 402.471.4818

mary.janssen@nebraska.gov education.ne.gov/nce/BMIT



Communication and Information Systems Career Field Communication Arts Cluster

Full

Year	Course	1
		DOMESTIC:

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Digital Design	270602 Digital Media	270611 Digital Design	270613 Advanced Digital Design -OR-
			270604 Foundations of Web Design
Video Production	270602 Digital Media	270609 Video Production	270610 Media Production -OR-
			270604 Foundations of Web Design
Web Design	270602 Digital Media	270604 Foundations of Web Design	270706 Web Design and Development

Jacqui Garrison

Communication and Information Systems Career Field Specialist

402.471.4865

jacqui.garrison@nebraska.gov education.ne.gov/nce/BMIT



Communication and Information Systems Career Field Information Technology Cluster

Full Year Course

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
	270501 IT Applications 1	270502 IT Applications 2	270504 IT Fundamentals -OR-
Business Technology			270604 Foundations of Web Design -OR-
			270611 Digital Design
	270502 IT Applications 2 -OR-	270611 Digital Design -OR-	111700 Statistics/Probability
Data Science	270703 Computer Science Principles	270604 Foundations of Web Design	-OR- 111720 AP Statistics
	270504 IT Fundamentals -OR-	270601 Networking	270707 Cybersecurity -OR-
IT Operations Management	270502 IT Applications 2		270711 PLTW Cybersecurity
	270504 IT Fundamentals -OR-	270604 Foundations of Web Design	270706 Web Design and Development
Web Development	270502 IT Applications 2		
	270504 IT Fundamentals -OR-	270704 Foundations of Computing	270703 Computer Science Principles -
Information Technology	270602 Digital Media		OR- 270702 AP Computer Science Principles
	270704 Foundations of Computing	270703 Computer Science Principles -	270701 Computer Science A -OR-
Computer Science		OR- 270702 AP Computer Science	270712 IB Computer Science - OR-
		Principles	270700 AP Computer Science A
PLTW Computer Science	270710 PLTW Computer Science Essentials	270708 PLTW Computer Science Principles	270709 PLTW Computer Science A

Software Development		270707 Cybersecurity	270701 Computer Science A -OR- 270712 IB Computer Science - OR- 270700 AP Computer Science A -OR- 270705 Software Development
PLTW Software Development	270708 PLTW Computer Science Principles	270711 PLTW Cybersecurity	270709 PLTW Computer Science A
CISCO Networking	270505 CISCO I: Introduction to Networks	270506 CISCO II: Routing and Switching Essentials	270507 CISCO III: Scaling Networks

Jacqui Garrison

Communication and Information Systems
Career Field Specialist

402.471.4865

jacqui.garrison@nebraska.gov education.ne.gov/nce/BMIT



Health Sciences Career Field

Health Sciences Cluster

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Health Sciences	077300 Health Sciences 1	077301 Health Sciences 2	077302 Health Sciences 3
Health Informatics	077300 Health Sciences 1	077301 Health Sciences 2 -OR- 077600 Medical Terminology	077800 Health Information Technology -OR- 077812 Health Information Management and Ethics
Biotechnology Research	077300 Health Sciences 1	077600 Medical Terminology -OR-	012004 Agriculture Biotechnology -OR-
Diotestinology Research		130210 Anatomy and Physiology	077304 Exploring the Clinical Lab
Therapeutic Certificated Services	077300 Health Sciences 1	077301 Health Sciences 2 -OR- 077600 Medical Terminology	077400 Certificated Nursing Assistant - OR- 077402 Emergency Medical Technician/Cert - OR-
			077444 Pharmacy Technician -OR- 077401 Medication Aide -OR-
			077446 Phlebotomy Technician
Behavioral Health	077300 Health Sciences 1	077301 Health Sciences 2	077801 Behavorial Health 1 -AND- 077802 Behavorial Health 2
Life Span Performance	077300 Health Sciences 1	130210 Anatomy and Physiology - OR-	077500 Introduction to Sports Medicine - OR-
		077600 Medical Terminology	077702 Human Life Cycle Nutrition -OR-
			077601 Exercise Science -OR-
			077701 Performance Nutrition

	077300 Health Sciences 1	077301 Health Sciences 2	077900 Allied Health and Medicine -OR-
Allied/Public Health			077303 Personal and Community Medical Issues/Public Health
PLTW Principles of Biomedical Science			077803 PLTW Principles of Biomedical Science 1 -AND-
			077804 PLTW Principles of Biomedical Science 2
			077805 PLTW Human Body Systems 1 -AND-
PLTW Human Body Systems			077806 PLTW Human Body Systems 2
PLTW Medical Interventions			077807 PLTW Medical Interventions 1 - AND-
			077808 PLTW Medical Interventions 2
PLTW Biomedical Innovation			077809 PLTW Biomedical Innovation 1 -AND-
			077810 PLTW Biomedical Innovation 2

Carol Packard

Health Sciences Career Field Specialist 402.471.4813

carol.packard@nebraska.gov education.ne.gov/nce/HealthScience



Human Sciences and Education Career Field

Education and Training Cluster

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Education and Training			350010 Field Experience in Education and Training

Kristin Vest

Human Sciences & Education
Career Field Specialist

Chelsey Greene

Human Sciences & Education
Career Field Specialist

402.471.4814

kristin.vest@nebraska.gov education.ne.gov/nce/HSE

chelsey.greene@nebraska.gov education.ne.gov/nce/HSE



Human Sciences and Education Career Field

Human Services Cluster

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Child, Youth, and Family Studies	090123 Human Growth and Development -OR- 090101 Introduction to Human Science/FACS	090119 Child Development -OR- 090117 Parents and Families	090116 Interpersonal Relationships -OR- 320711 Human Services/FACS Work-Based Learning -OR- 090104 Life and Career Readiness
Early Childhood Education and Services	090119 Child Development	090121 Early Childhood Education and Services	090122 Early Childhood Practicum
Nutrition and Wellness	090107 Fundamentals of Food and Nutrition	090124 Nutrition	090125 Dietetics
Food Science	090107 Fundamentals of Food and Nutrition	090113 Food Science	320600 Fundamentals of Entrepreneurship - OR- 032370 Entrepreneurship - OR- 032600 College Introduction to Entrepreneurship
Design	090126 Intro to Design Principles	090103 Textile Construction -OR- 090109 Housing and Interior Design - OR- 090206 Fashion Design	320600 Fundamentals of Entrepreneurship - OR- 032370 Entrepreneurship - OR- 032600 College Introduction to Entrepreneurship - OR- 090207 Business of Textiles
Counseling and Mental Health	090101 Introduction to Human Science/FACS	090128 Careers in Mental Health -OR- 090127 Families in Crisis	151200 Psychology -OR- 151210 AP Psychology -OR- 151300 Sociology

FNS: Nutrition and Food Science Certified	Fundamentals of	Production, Nutrition and Health	090130 FNS Food Science -OR- 018082 FNS Nutrition Science
-------------------------------------------	-----------------	----------------------------------	--------------------------------------------------------------------

Kristin Vest

Human Sciences & Education
Career Field Specialist

Chelsey Greene

Human Sciences & Education
Career Field Specialist

402.471.4814 kristin.vest@nebraska.gov

education.ne.gov/nce/HSE

chelsey.greene@nebraska.gov education.ne.gov/nce/HSE



Human Sciences and Education Career Field

Law, Public Safety Corrections and Security Cluster

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Correction Services	390010 Foundations of Law, Public Safety, Corrections, and Security	390015 Introduction to Criminal Justice	390025 Courts and Judicial Process
Law Enforcement Services	390010 Foundations of Law, Public Safety, Corrections, and Security	390015 Introduction to Criminal Justice	390026 Police and Society
Emergency and Fire Management	390010 Foundations of Law, Public Safety, Corrections, and Security	390015 Introduction to Criminal Justice	077402 Emergency Medical Technician/Cert

Kristin Vest

Human Sciences & Education
Career Field Specialist

Chelsey Greene

Human Sciences & Education
Career Field Specialist

402.471.4814

kristin.vest@nebraska.gov education.ne.gov/nce/HSE

chelsey.greene@nebraska.gov education.ne.gov/nce/HSE



Skilled and Technical Sciences Career Field

Architecture and Construction Cluster

Full	Year	Course	11
			beckell.

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Architectural Design	100100 Introduction to Skilled and Technical Sciences -OR-	100140 Architectural Design 1	100141 Architectural Design 2
	090109 Housing and Interior Design		
Construction	100100 Introduction to Skilled and Technical Sciences -OR-	100110 Construction Trades 1 -OR- 016002 Structural	100120 Construction Trades 2
	100405 Electricity	Systems	

Tony Glenn

Skilled and Technical Sciences
Career Field Specialist

402.471.4819

tony.glenn@nebraska.gov education.ne.gov/nce/sts



Skilled and Technical Sciences Career Field

Energy and Engineering Cluster

		Full Year Course	1
Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Project Lead The Way (PLTW)	100160 PLTW Principles of Engineering -OR- 100161 PLTW Introduction to Engineering Design	100164 PLTW Aerospace Engineering -OR- 100162 PLTW Civil Engineering and Architecture -OR-	100163 PLTW Engineering Design and Development
		101901 PLTW Computer Integrated Manufacturing -OR- 100403 PLTW Digital Electronics	
Engineering	103191 Engineering Design and Systems Thinking - OR- 100100 Introduction	103192 Engineering Problem Solving - OR- 103194 Robotics	103193 Systems Engineering and Project Management -OR- 103195 Advanced
Energy	to Skilled and Technical Sciences 100406 Fundamentals of Energy	100408 Sustainable Energy	Robotics 100407 Physics and Mathematics of Energy

Tony Glenn

Skilled and Technical Sciences
Career Field Specialist

402.471.4819

tony.glenn@nebraska.gov education.ne.gov/nce/sts



Skilled and Technical Sciences Career Field

Manufacturing Cluster

Full Year Course

Full Year Course 1			YEAR
Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
	100100 Introduction to Skilled and Technical Sciences -OR-	101920 Manufacturing Processes – Woods -OR-	101921 Manufacturing Production - Woods -OR-
	101920 Manufacturing Processes – Woods -OR-	101400 Manufacturing Processes – Metals -OR-	101922 Advanced Manufacturing and Fabrication - Woods -OR-
	101400 Manufacturing Processes – Metals -OR-	101950 Manufacturing Processes – Plastics -OR-	101401 Manufacturing Production - Metals -OR-
Manufacturing	101950 Manufacturing Processes – Plastics -OR-	100401 Introduction to Electronics	101402 Advanced Manufacturing and Fabrication - Metals -OR-
	100130 Drafting and Design		101951 Manufacturing Production - Plastics -OR-
			101952 Advanced Manufacturing and Fabrication - Plastics -OR-
			100402 Advanced Electronics -OR-
			101900 Introduction to Mechatronics
	100100 Introduction to Skilled and Technical Sciences -OR-	101930 Welding 1 - OR-	101940 Welding 2 - OR-
Wolding		101940 Welding 2 - OR-	101941 Welding 3 - OR-
Welding	101930 Welding 1 - OR-	016004 Welding	016005 Metals and Fabrication
	100130 Drafting and Design		

Tony Glenn

Skilled and Technical Sciences Career Field Specialist 402.471.4819 tony.glenn@nebraska.gov education.ne.gov/nce/sts



Skilled and Technical Sciences Career Field

Transportation, Distribution and Logistics Cluster

			press.
	Voor	Course	11 I
ı uli	ı cai	Course	latal.

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
	101600 Transportation 1 - OR-	101620 Transportation 2	101630 Transportation 3 - OR-
TDL - Technician	100100 Introduction to Skilled and Technical Sciences -OR-		101640 Collision Repair
	016003 Power, Structural, and Technology Systems		
TDL - Supply Chain	101601 Introduction to TDL	101610 Distribution and Logistics	101650 Business Logistics

Tony Glenn

Skilled and Technical Sciences Career Field Specialist 402.471.4819

tony.glenn@nebraska.gov education.ne.gov/nce/sts

It is the policy of the Nebraska Department of Education not to discriminate on the basis of sex, disability, race, color, religion, marital status, age, national origin, or genetic information in its educational programs, admission policies, employment, or other agency programs.

This project was funded through the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), administered through the Nebraska Department of Education. However, the contents do not necessarily represent the policy of the United States Department of Education, and you should not assume endorsement by the Federal Government.



